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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,858	12/09/2003	Wu Feng Qing	P06454US01	3532

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801 GRAND AVENUE
SUITE 3200
DES MOINES, IA 50309-2721

EXAMINER

GALL, LLOYD A

ART UNIT	PAPER NUMBER
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3676

DATE MAILED: 05/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/730,858	Applicant(s) QING, WU FENG	
	Examiner Lloyd A. Gall	Art Unit 3676	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7,9,10,12-15,30,31 and 34-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7,9,10,12-15,30,31 and 34-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 December 2003 and 29 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The disclosure is objected to because of the following informalities: In the amended paragraph to page 4, lines 16-21 of the specification, a Brief Description must be provided for Figure 7A.

Appropriate correction is required.

Claim 34 is objected to because of the following informalities: Claim 34 is not clear as to which claim it is intended to depend from, since claim 34 recites a second portion and depends from claim 31, while the first portion is claimed in claim 32.

Appropriate correction is required.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marin (733) in view of Fann et al (264).

It is first noted that a storm door is not being positively claimed. Marin teaches a lock including side plates 24, 26, a dead bolt 42, 44, a cam 74, 76 having a portion 76 extending into a notch 80 of the dead bolt, and a spring 84 outside the dead bolt and engaging with two notches 86 to bias the dead bolt toward a locked and unlocked position, defining an over-center biasing mechanism. The spring 84 further limits rotation of the cam and includes a through hole as seen in fig. 8. Fann et al teaches a spring 75 in fig. 7 cooperating with first and second converging flat surfaces and an

over-center point to bias the bolt between locked and unlocked positions. It would have been obvious to modify the over-center biasing mechanism of Marin to include converging first and second flat surfaces which converge to define an over-center point to be engaged by a spring, in view of the teaching of Fann et al, the motivation being that the notches 86 of Marin would not need to be formed, and the spring engagement defined by Fann et al would provide a stronger engagement position than that provided by the spring 84/notches 86 teaching of Marin.

Claims 6, 7, 9, 10 and 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marin in view of Fann et al as applied to claim 1 above, and further in view of Kondratuk (162).

It is first noted that even though Kondratuk is drawn to a storm door environment as set forth in column 2, line 43, a storm door is not being positively claimed. Kondratuk teaches a lock for a mortise of a storm door as set forth in column 2, line 43, including side plates 44, 50, to receive a dead bolt 30 and a cam 20 therein, including a through hole in the cam to receive a spindle cooperable with a key cylinder and thumb turn on opposite sides of a storm door as set forth in column 2, lines 64-67, a first notch (recessed area) in the dead bolt between portion 39 and the thickened portion 37 of the bolt as seen in fig. 6, the first notch 64 receiving a cam arm 22 (fig. 8) of the cam, the cam arm 22 including a cam finger 23 which is received in a second notch 62 in the bolt, the second notch 62 having closed ends which prevent the finger 23 from passing into a lockout situation, the cam 20 cooperable with springs 60, wherein edge 34 defines both a stop and a lock indent as seen in fig. 3 and edge 32 defines both a stop and an unlock

indent as seen in fig. 2. The indents 32, 34 are indented with respect to the first notch 64, and are approximately perpendicular to the cam finger 23. The second notch 62 is angular (perpendicular) to the first notch. It would have been obvious to modify the cam arm 76, notch 90 connection of Marin to include a cam arm, cam finger and first and second notches connection, in view of the teaching of Kondratuk, the motivation being to ensure the prevention of a lockout situation between the cam and dead bolt of Marin.

Claims 1-5, 7, 30 and 38-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al (839) in view of Marin and Fann et al (264).

Chen et al teaches a storm door and a storm door lock body, including a storm door as seen in fig. 10, having opposed faces and an edge 108 with a mortise 102, side plates 44, 45, escutcheons 35, 56, a key cylinder 38, a first spindle 74, a thumb button 52, a cam body 42 with a hole to receive the spindle 74, a cam arm 88 to engage a notch 92 in a dead bolt 46, a live bolt 82, a second spindle 32 and opposed handles 34 to actuate the live bolt 82. Marin teaches a spring outside the dead bolt as set forth above. Fann et al teaches a spring 75 in fig. 7 cooperating with first and second converging flat surfaces and an over-center point to bias the bolt between locked and unlocked positions. It would have been obvious to provide a spring with the dead bolt of Chen et al, outside the dead bolt, in view of the teaching of Marin, the motivation being to bias the dead bolt in its locked and unlocked positions and to aid in defining the stop positions of the cam in its locked and unlocked conditions. It would have been obvious to modify the over-center biasing mechanism of Chen et al as modified by Marin, to include converging first and second flat surfaces which define an over-center point and

Art Unit: 3676

an engaging spring, in view of the teaching of Fann et al, the motivation being that the notches 86 of Marin would not need to be formed, and the spring engagement defined by Fann et al would provide stronger engagement positions than that provided by the spring 84/notches 86 teaching of Marin.

Claims 6, 9, 10, 12-15, 31, 32 and 34-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al in view of Marin and Fann et al as applied to claims 1 and 30 above, and further in view of Kondratuk.

Kondratuk has been discussed above. It would have been obvious to modify the cam arm 88 and notch 92 connection of Chen et al to include a cam arm, cam finger and first and second notches connection, in view of the teaching of Kondratuk, the motivation being to prevent a lockout situation and enable the stops 96 of Chen et al to not be required.

Applicant's arguments with respect to claims 1-7, 9, 10, 12-15, 30-32 and 34-40 have been considered but are moot in view of the new ground(s) of rejection.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

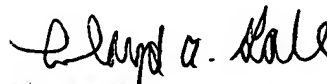
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lloyd A. Gall whose telephone number is 571-272-7056. The examiner can normally be reached on Monday-Friday, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Glessner can be reached on 571-272-6843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3676

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LG LG
May 15, 2006


Lloyd A. Gall
Primary Examiner